



# **San Jacinto River Waste Pits Superfund Site**

## **USACE Support**



# **San Jacinto River Waste Pits**

**Oct 1964**

**[only south pit;  
north pits not  
built yet]**





**South  
Impoundment  
1965**







# Temporary Cap Construction Completed July 2011





# **Previous USACE involvement:**

- **Review of PRP modeling report.**
- **Review of PRP temporary cap design.**
- **Review of PRP draft Feasibility Study.**
- **Special Permit Area (EPA/USACE/TCEQ).**



## San Jacinto River Waste Pits

-  Preliminary Perimeter - EPA (2000)
-  Permits Area of Concern - USACE, EPA, TCEQ (2007)
-  1960 Original Perimeter of Impoundment - EPA (2000)
-  Location of Impoundment Leach of 1:10 - EPA (2000)



Source:  
Aerial photo is from DigitalGlobe 1/2000.  
Preliminary Perimeter is from EPA Region 6.  
1960 Original Impoundment was created by EPA Region 6 using 1960 aerial photo from USGS.  
Impoundment Leach of 1:10 was created by EPA Region 6 using 1964 aerial photo from USGS.  
Permits Area of Concern is from the USACE, EPA, and TCEQ.

EPA makes no claim as to the accuracy of the data or its suitability for any particular use.

Map created February 10, 2011



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# **The Issues:**

- **San Jacinto River**
- **Community concerns**





# San Jacinto River

- Upper Texas coast recorded 25 hurricanes, 7 of which were major (Category 3 to 5) storms.
- October 1994 storm greater than 100-year flood (1.6 times):
  - Major soil erosion – 8 pipelines ruptured & 29 undermined; 3000 homes destroyed.
  - 10 to 12-feet of bed scour south of the I-10.



## Lower San Jacinto River

San Jacinto River at I-10 (Photo: HCFCD)



# Temporary Cap – Berm Erosion

- Western Berm erosion July 2012.
- Completion of repairs August 2012.





# **USACE Support**

- **Should waste stay or should it go?**
- **Construction oversight (future - amend IAG).**

***Engineer Research and Development  
Center (ERDC), Vicksburg MS.***

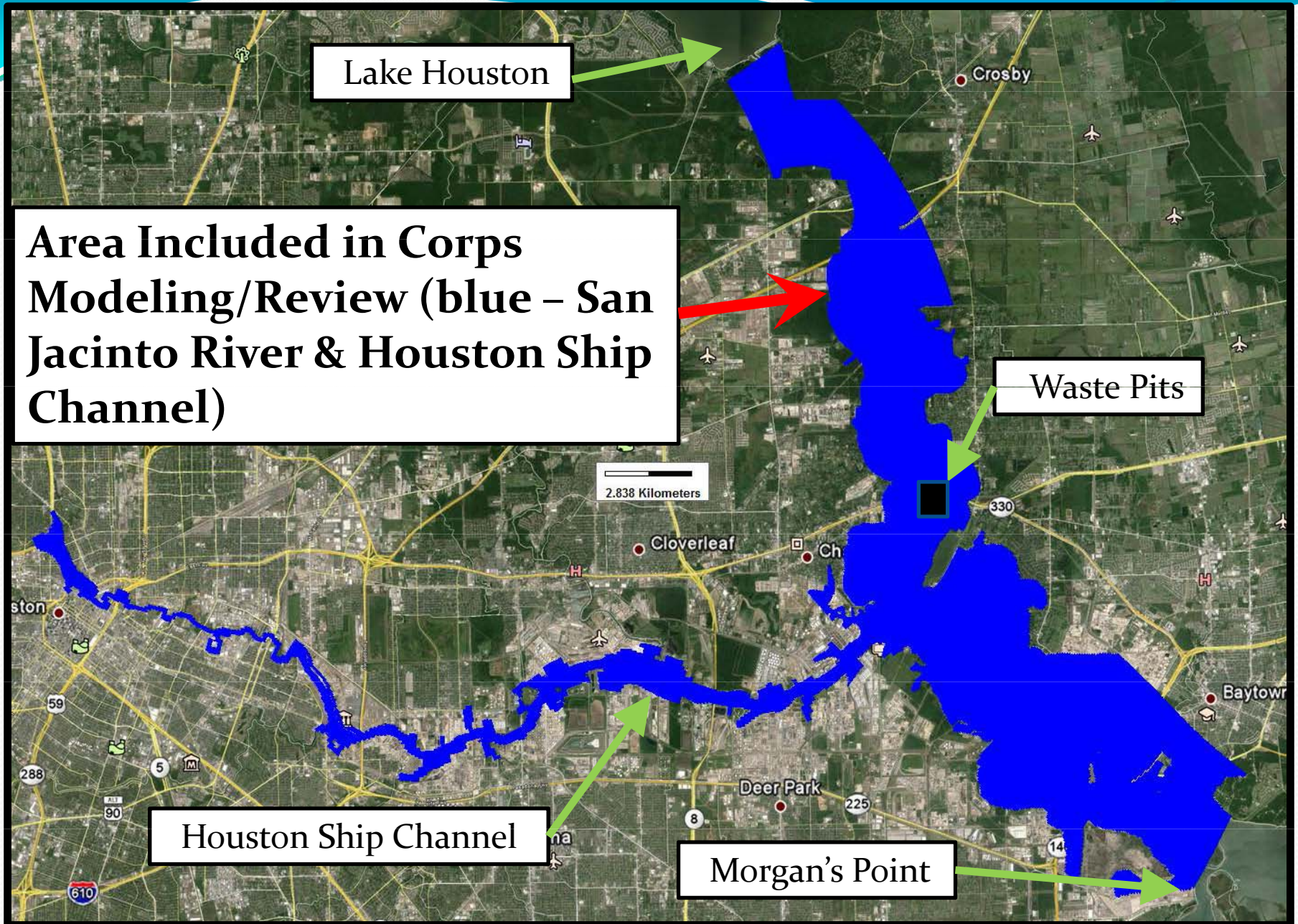




# **U.S. Army Corps of Engineers**

- Computer models – river flow & scour.
- Evaluation of remedial alternatives.
- Short & long term cap reliability? [storms, prop wash & barge strikes].
- Any migration through cap?
- Removal Best Management Practices.









# **U.S. Army Corps of Engineers**

## **Completed work:**

- New model calibrated.
- Design/construction review of entire cap.
- Assessed potential dioxin migration through cap.
- Assessed potential barge strike impacts.
- Case history of armor failures.
- Sediment re-suspension & residuals; BMPs.
- Draft report under review.

